

AMENDMENTS TO THE CLAIMS

33. (Currently Amended) An integrated capacitor formed in a trench having a width of no more than about ~~0.25~~ 0.18 μm and a depth of greater than about 10 μm ~~an aspect ratio greater than about 20:1~~, comprising:

a dielectric layer lining the trench; and

a conductively doped, as-deposited polysilicon layer filling the trench.

34. (Original) The integrated capacitor of Claim 33, wherein the conductively doped polysilicon layer comprises arsenic.

35. (Original) The integrated capacitor of Claim 33, wherein the trench has a depth of greater than about 5 μm .

36. (Original) The integrated capacitor of Claim 35, wherein the trench has a depth of greater than about 7 μm .

37. (Original) The integrated capacitor of Claim 36, wherein the trench is formed in a semiconductor substrate.

Please added the following claim:

38. (New) An integrated capacitor formed in trench having a width of no more than about 0.25 μm and an aspect ratio of about 40:1, comprising:

a dielectric layer lining the trench; and

a conductively doped, as-deposited polysilicon layer filling the trench.